

## 4-Channel Simultaneous Quick Charger

### Instruction Manual

IDX Technology thanks you for choosing the VL-4S and is sure that you will benefit from its unique features. Please utilize this instruction manual to best maximize and safely use your VL-4S. If you have any additional questions, please contact the appropriate IDX office or visit our website <http://www.idx.tv>

#### Features

- Can charge all IDX ENDURA System Li-Ion batteries (All IDX NP-Type Li-Ion and Ni-CD batteries via optional A-E2NP Charge Adaptor).
- Full simultaneous quick charging on all 4 channels.
- Auto safety & protection features for damaged or misused batteries.
- Optimum charger for high battery usage, fast and powerful charge capabilities.
- Robust lightweight polycarbonate case, recessed power switch, built-in AC line spare fuse, convenient carrying handle.
- Universal AC power input for worldwide use.

#### Charger Operation

VL-4S chargers can charge up to 4 batteries simultaneously. With each charge channel operating independently, batteries can be connected in any order and at any time.

#### Operating Instructions

A. Connect AC power cord firmly.

B. Turn the front mounted power switch ON (Power LED will light and show solid Amber).

C. Basic Operation:

- ① Insert a battery-----"Battery Check Mode" starts, the charge channel LED will show solid Red while the charger is checking the battery.
- ② Battery Check-----After 5 seconds the LED will remain Red indicating that the VL-4S is operating in quick charge mode, if a battery has a fault the LED will flash Amber. If a battery cannot initially enter quick charge a recovery program will start, during which time the LED will also remain solid Red. When the battery has successfully recovered, the VL-4S will automatically change to a quick charge program. If a battery cannot be recovered or is detected to be over-charged, the LED will flash Amber indicating a battery fault.
- ③ Charge Complete--- When a battery has been fully charged the charge channel LED will automatically change to solid Green, indicating that the battery is ready for use.

#### LED Colour Status List

- Light Off ----- No Battery detected
- Solid Red ----- Battery Check / Quick Charge / Battery Recovery in progress
- Solid Green ----- Charge Complete
- Flashing Amber ----- Battery Fault
- Flashing Red ----- Charger Fault

#### Description

As part of IDX's ENDURA System the VL-4S chargers offer "full" 4 channel simultaneous quick charging, designed with high battery usage in mind they optimize charging with a minimum wait time. The VL-4S can be used to charge all IDX ENDURA Li-Ion batteries and all IDX NP-Type batteries via the optional A-E2NP Charge Adaptor.

For Li-Ion batteries, ENDURA or NP, when up to 3 batteries are connected the batteries are charged at 3.0A rate, when 4 or more batteries are connected the charge rate is 2.3A.

#### Safety Features

The VL-4S has built in safety features to protect the charger and batteries from serious damage in the event an attempt is made to charge a faulty battery. Low voltage batteries are detected prior to applying a quick charge current. If a battery is found to have a low voltage, it will not be quick charged until it reaches the acceptable quick charge level. This prevents any damage to the unit or to the battery. Batteries reaching an over voltage condition during the charge process will also be detected and charging will be stopped automatically.

#### General Notes and Safety

- Do not attempt to open or modify this unit. All work should be carried out by IDX authorised service personnel only.
- Use only with compatible batteries listed in this manual. Charging non-compatible batteries may cause fire, electrical shock or other incidents.
- When connecting a battery be sure to insert the battery into the battery socket or connector firmly.
- When in use do not place anything on the charger and do not block ventilation holes. Use in a well ventilated area.
- Do not expose to, use or place the unit in direct sunlight, extreme dust, water or other hazardous environments.
- During charging the temperature of the charger will rise, this is normal and not a malfunction.
- A short between the plus (+) and minus (-) charge pins may cause fire, electrical shock or other incidents. Make sure that the charge connector does not touch any metal parts when a battery is not connected.
- Stop charging immediately if the charging does not complete within the designated time. In case of abnormal smell, leak, colour change or case deformity during use turn the power off and unplug the cable from the socket to avoid possible injury.
- Only use the AC cable included with the charger or ones specified. If fused confirm the fuse rating capacity before use.
- For continued protection replace any fuses with specified type and rating.
- This unit contains no user serviceable parts.
- In case of fault or service, please contact your IDX dealer or appropriate IDX office.

#### Specifications

- Compatible Batteries ----- All IDX ENDURA System Li-Ion batteries  
All IDX NP-Type Li-Ion and Ni-CD batteries via A-E2NP Charge Adaptor
- Quick Charge Current ----2.3A(3.0A) / 16.8V for Li-Ion Battery  
1.9A for Ni-Cd Battery
- Input Voltage ----- 100V ~ 240V AC 50/60 Hz Automatic
- Operating Temperature --- -10°C ~ 40°C
- Power Consumption ----- 310 VA max
- Dimension ----- Approx. 156 (W) x 153 (H) x 288 (D) mm  
Approx. 6.2 (W) x 6.0 (H) x 11.4 (D) inches
- Weight ----- Approx. 3.1 kg (6.8 lbs)